UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/712,725 | 11/13/2003 | Jeng-Shyong Wu | 71206 | 2171 |

23872 7590 12/15/2005

MCGLEW & TUTTLE, PC
P.O. BOX 9227
SCARBOROUGH STATION
SCARBOROUGH, NY 10510-9227

| EXAMINER | |
|---|---|
| REHM, ADAM C | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2875 | |

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|---|---|---|
| | 10/712,725 | WU, JENG-SHYONG |
| | Examiner | Art Unit |
| | Adam C. Rehm | 2875 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) 1-51 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-51 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 9/27/05 and 11/13/03 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims.

- Claim 19 discloses a plurality of LED chips installed on a base.

These features must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 3B.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

3. Claim 41 is objected to because of the following informalities: "the method includes the following steps: an end of said insulating lead wires" in Lines 3-4. The sentence is a fragment and does not provide a step. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 49 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Line 2 claims, "...protective device is molded around said light bulb..." which is not disclosed in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 41 recites the limitation "said insulator" in Line 10, "electrical portion" in Line 12 and "insulating part" in Line 13. There is insufficient antecedent basis for these limitations in the claim.

6. Regarding Claim 40, the limitation "function controller" is indefinite in its meaning and purpose.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-8, 10-22, 24-38, 41-48, 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over HUANG (US 6,299,332) in view of BRUNNER ET AL. (US RE37,554) and URBAN (US 6,669,515).

8. Regarding Claim 1, 6-8, 10-18, 20-22, 24-31, 41-46, HUANG provides:

- A plurality of insulating lead wires each having a conductor in a center (21, Fig. 7 illustrates a common insulated wire);
- Said insulator of said insulating lead wire is bent back and extended sideward (Fig. 7 shows the insulator bent back and extended sideways);
- A protective device for directly holding said LED light bulb/holding the bulb at a base thereof (1 operates precisely the same as the claimed invention)/the base of the light bulb (the body of the light between bulb 2 and wires 21);
- The electrical connecting portion and a bent insulator positioning portion to make said insulator not easily be released (upon installation of the components depicted in Fig. 7, the bent configuration portion of the insulated wire 21 would prevent release of the un-insulated part of the wire 21);

- Lead wires connected to the light source in a parallel configuration (Fig. 1 shows wires 21 entering the body of the light source 2 in a parallel configuration and at a predetermined angle of 180 degrees or straight line);
- A transparent, plastic protective device (Column 2, Lines 58-60) or plurality of hollow plates (Fig. 7) that are configured in various predetermined shapes (Column 2, Lines 33-34) having openings (13) for installing wires (Fig. 8); and
- A border (18/19, Fig. 9) for joining the plates and holding/enveloping the light source (Fig. 8) and locking the bent part of the wires so as not to be easily released (Fig. 8).

9. HUANG does not disclose an LED light source and associated electrical connection. However, LEDs and the advantages thereof are notoriously known in the art. BRUNNER provides an LED light bulb (1) consisting of an LED chip (2) and bonded wires (9) both connected to a plurality of lead frames (7/8) and enveloped by a lamp cap (Fig. 1) with one end of the lead frames emerging from the lamp cap (Fig. 1) for the purpose of obtaining the well-known advantages of LEDs including long lifespan, low operating temperatures and low power consumption. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the lamp unit of HUANG to include the type of LED bulb as taught by BRUNNER in order to obtain the known LED advantages listed above. While neither HUANG nor BRUNNER explicitly disclose a source of power, it is inherent that both require a power source to operate.

10. Regarding Claims 2-4 and 32, the BRUNNER LED has a lamp cap (1) with a flange (15) and made of transparent or colored plastic (Column 5, Lines 17 and 22).

11. Regarding Claim 5, the BRUNNER LED provides an insulating positioning bracket (14) installed on said plurality of lead frames so as to firmly fix said lead frames (Fig. 1).

12. Regarding Claim 19, while BRUNNER discloses the invention as cited above, BRUNNER does not teach a plurality of chips. However, it has been held that the mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.,* 193 USPQ 8.

13. Regarding Claim 33-38, the HUANG device can be connected in strings, net or network arrangements (Column 1, Line 34 and Figs. 11 and 12) or a two-plate shape (Fig. 8).

14. HUANG and BRUNNER disclose the claimed invention, but do not specifically disclose insulation manipulated as claimed (i.e. "...insulation at ends of said lead wires being bent away from said conductor and extended radially at ends of said lead wires being bent away from said conductor and extending radially outward from said conductor..."). However, URBAN teaches various ways of securing a wire within an aperture of a terminal including to "bunny ear" the wire by slitting the insulation and then tying the insulation into a knot, which requires pulling the insulation away from the conductor, so as to provide an obstruction to help prevent the wire from pulling through the aperture (Column 1, Lines 36-49). It would have been obvious to one of ordinary skill in the art at the time of invention to modify HUANG and use the insulation as taught by URBAN in order to prevent the wire from pulling through the aperture.

15. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over HUANG (US 6,299,332), BRUNNER ET AL. (US RE37,554) and URBAN (US 6,669,515) as applied to Claim 31 and in further view of BRUCE ET AL. (US 5,957,564).

16. HUANG discloses the invention as cited above along with the teachings of BRUNNER and URBAN, but does not disclose a power supply device connected by a plug and a socket or a functional controller. However, BRUCE teaches a lighting display having a lighting function controller (111, Column 4, Lines 48-54) and electric wiring and a plug for providing electric power to the display (Column 7, Lines 58-59). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the lamp unit of HUANG to include the type of lighting function controller, wiring and plug as taught be BRUCE in order to provide connectable electric power to the display.

17. Claims 9 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over HUANG (US 6,299,332), BRUNNER ET AL. (US RE37,554) and URBAN (US 6,669,515) as applied to Claims 1 and 18 and in further view of WILSON (US 2,077,973).

18. HUANG discloses the invention as cited above along with the teachings of BRUNNER, but do not explicitly disclose a conductor and electrodes electrically connected by welding or pressure bonding. However, WILSON teaches soldering conductor wires to a light source (Column 3, Lines 26-27, Fig. 2) to provide an electric connection. It would have been obvious to one of ordinary skill in the art at the time of

invention to modify the lamp unit of HUANG to include the type of attached electrical components via welding or the like as taught by WILSON in order to achieve the known advantages of such, e.g. to provide a secure electric connection.

***Response to Arguments***

19. Applicant's arguments filed 9/27/2005 have been considered but are partially moot in view of the new ground(s) of rejection. The relevant remaining arguments have been fully considered but they are not persuasive.

20. Applicant argues that the HUANG device does not teach a structure which is directly connected to a light bulb, to a connecting portion and to insulation at end of lead wires. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "...a structure which is directly connected...") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant claims "...a protective device for directly holding..." and HUANG discloses a shell (1), which directly holds and supports the elements within the shell (Fig. 7). Furthermore, the shell also holds a second protective device connected directly to the base of the light bulb (the body of the light between bulb (2) and wires (21)), which is notoriously common in the art and is used for the purpose of providing an insulated direct connecting to the bulb (2) and insulated electrical wires (21). A broad reading of HUANG clearly reads on the claimed invention.

21. Regarding Claim 44, Applicant argues that HUANG does not teach or suggest the step of separating the end of the insulating lead wire to expose the conductor. Applicant also notes that HUANG is silent as to "how the insulation is removed." As previously noted, insulated wires are notoriously common in the art. Likewise, the step of separating the insulation from the conductor is a requirement to utilize such a wire as admitted by applicant. The wire cannot be used without piercing or otherwise separating the insulation from the conductor. As such, it is undisputable that the step of separating the insulation from the conductor and otherwise exposing the conductor in order to use the wire is implied by HUANG.

22. Regarding Claim 31, Applicant argues that HUANG does not teach or suggest a protective device for holding the entirety or parts of said light emitting of the light emitting elements. As previously noted, HUANG discloses at least two objects that qualify as protective devices as defined by the claimed invention (1 and the light body between bulb (2) and wires (21)). Notably, both of these objects hold parts (2 and 21) of light emitting elements (Figs. 1 and 12). Applicant further argues that HUANG does not teach or suggest, "an opening." However, Fig. 1 illustrates 21 bending backwards and extending sideways, thus creating an opening (to the left of the light (2) where 21 would reside if not for the backwards bending and sideways extension thereof). Furthermore, URBAN has been added to more specifically address Applicant's insulation claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

23. KATO ET AL. (US 5,584,122) discloses a method for utilizing insulation to anchor a wire.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Rehm whose telephone number is 571.272.8589. The examiner can normally be reached on M-F 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571.272.2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACR
12/8/2005

ALAN CARIASO
PRIMARY EXAMINER